A METHOD, APPARATUS, DATA STRUCTURE AND SYSTEM FOR SCHEDULING WORK CONSISTENT WITH AN ENTITY'S STRATEGIC OBJECTIVES

Abstract

A method, apparatus, data structure and system for scheduling work that is consistent with and supportive of the strategic objectives of an entity is disclosed herein. The present methods and means for scheduling work rely primary or exclusively on scheduling work based upon the oldest order being first. This method and means of scheduling work is then manually over-ridden to accommodated for extenuating circumstances such as rush orders, priority customers, equipment downtime, attempts to be more efficient and a host of other reasons. Unfortunately, neither the existing method nor the manual interventions to change the schedule are focused or designed to be consistent with and supportive of the strategic objective of the entity. As a result, the existing methods employed for scheduling work are at best neutral in their efforts to support the strategic objectives of an entity, and at worst case scenario they are significantly detracting from the achievement of the strategic objective. In addition, the existing methods do not provide a means for evaluating the impact of the current methods of scheduling work against the strategic objective.

The present invention provides a means to schedule work consistent with the strategic objective of an entity. In its preferred embodiment, the strategic objectives are defined, prioritized and the primary strategic objective is chosen along with a measure for the primary strategic objective. Following that, a measure for scheduling work is defined and chosen that is consistent with and/or supportive of the primary strategic objective and the primary strategic objective's measure. Next, the possible constraints to schedule work by are evaluated, the primary constraint selected and the order within the chosen constraint prioritized. Then the work schedule measure is calculated for each job and/or order in the work queue for the prioritized selected constraint. All of the independent jobs and/or orders are then scheduled and the dependant jobs are sorted based upon the calculated work schedule measures with the job and/or order having the largest positive impact on the work schedule measure being first. The prioritized job and/or order is then scheduled into the selected prioritized constraint and the job is removed from the job queue. The calculated work schedule measure for the scheduled job is then added back onto the work schedule measure for each of the remaining jobs and/or orders in the work queue for the specific prioritized constraint and the process then continues with re-sorting and scheduling the remaining jobs and/or orders until all of the jobs and/or orders for all of the constraints have been scheduled.